Inventor: LOUSTAUDAUDINE et al. Application No.: 10/518,068

REMARKS

This is in response to the Office Action mailed on May 3, 2007, in which claims 1-31 were pending. Objections were made to two lines of the specification. Claims 13, 18, 21 and 31 were rejected as indefinite, and claims 1, 3 and 5-31 were rejected over the prior art. Claims 2 and 4 were rejected as dependent upon a rejected base claim, but were noted to define patentable subject matter. With this amendment, claims 13, 18, 21 and 31 are amended to address the indefiniteness. Claims 2 and 4 are rewritten in independent form. The limitation of claim 3 is added to claim 1 and more clearly recited, and claim 3 is canceled. As explained further below, all of claims 1, 2 and 4-31 are in condition for allowance, and reconsideration and notice to that effect are respectfully requested.

The specification was objected to at page 3, lines 27-28 and at page 14, line 8. Changes to these paragraphs are made to address these objections, which should now be withdrawn.

Claims 13, 18 and 21 were rejected as indefinite due to the phrase "close to". These claims are amended to delete the "close to" phrase, obviating this rejection. Claim 31 was rejected as indefinite, with the Office Action stating, "It is not clear whether the applicant claims each limitation or one limitation from the group of onboard means listed." Claim 31 is amended into a more typical U.S. Markush group format, and further making it clear that the claims requires any one or more of the items listed. All of these indefiniteness rejections should now be withdrawn.

Claims 2 and 4 were rejected as dependent upon a rejected base claim. Claims 2 and 4 are rewritten into independent form, including all of the limitations of the base claim and any intervening claims, and should now be allowed.

Claims 1, 3, 5-9, 11-15, 20-28 and 31 were rejected as anticipated by Silver. Claims 1, 9, 11, 16, 17 and 19 were rejected as anticipated by Smith, and claim 18 was rejected as obvious over Smith. Claims 1, 29 and 31 were rejected as anticipated by McDermott. As hereby amended, claim 1 requires the limitation of former claim 3, that the lighter than air aircraft have at least two balloons connected together by a chassis having a mechanical connection articulated about at least one axis approximately parallel to the longitudinal axis of the aircraft. The limitation is further clarified to note that the mechanical connection enables at least one connected balloon to pivot relative to the chassis. (See the application at page 14, lines 14-16, no new matter is added). The only basis of rejection of prior claim 3 was the Silver patent, with the Office Action stating, "Silver discloses... a

9_

connecting means formed by (10), (11), (12), (13), (14), (15), (16), and (17) connecting the two balloons through a mechanical connection (page 2, lines 12-14) that is articulated about an axis parallel to the longitudinal axis of the aircraft (page 1, line 96-97)." To the contrary, page 2, lines 12-16 of Silver states, "These horizontal and vertical beams are all fastened securely to the rings or framework of the gas bag containers so that the whole structure is held perfectly rigid in a unitary structure." Page 1, lines 95-96 of Silver states that the gas bag containers are "secured rigidly together". Silver also indicates that the main frame structure includes "spaced apart vertical beams 12 and 13 that are secured rigidly to the horizontal beams." (Page 2, lines 10-12). Aircraft such as these can be subjected to conditions (for example due to a turbulent wind) that can generate sudden, possibly opposing forces or moments on the balloons. With the rigid structure of Silver, such opposing forces must be bourn entirely as stresses on the beams of the frame structure. In the present invention as defined by amended claim 1, however, the aircraft has a mechanical connection which is articulated, enabling at least one of the balloons to pivot relative to the chassis. With the inventive structure defined by amended claim 1, the articulation better permits the aircraft to withstand situations when relatively different forces or moments are placed on the two or more balloons. This structure is not disclosed or suggested by the rigid structure of Silver.

Similarly to Silver, Smith teaches a rigid connecting structure. Smith does not disclose or suggest a mechanical connection articulated about at least one axis approximately parallel to the longitudinal axis of the aircraft, enabling the at least one connected balloon to pivot relative to the chassis. McDermott teaches several embodiments having a rigid structure, and several other embodiments with cable connections between the rigid members with no articulation. McDermott does not disclose or suggest a mechanical connection articulated about at least one axis approximately parallel to the longitudinal axis of the aircraft, enabling the at least one connected balloon to pivot relative to the chassis.

Accordingly, none of the cited references, alone or in combination, disclose or suggest the invention defined by claim 1 as amended. The rejection of claim 1 over the prior art should now be withdrawn. Claims 5-31 all depend from claim 1 and are allowable for the same reasons, among others.

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-10-

The application containing pending claims 1, 2 and 4-31 is in condition for allowance. Reconsideration and notice to that effect is respectfully requested. The Examiner is invited to contact the undersigned at the telephone number listed below if such a call would in any way facilitate allowance of the application.

Respectfully submitted,

SHEWCHUK IP SERVICES, LLC

Date: July 30, 2007 By ____/JDS/_

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